

Notice of Allowability

Application No.

09/974,956

Examiner

Tesfaldet Bocure

Applicant(s)

HIRATA, MASARU

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/3/06 & 7/25/06.
2. ☒ The allowed claim(s) is/are 1,2,4 and 5, renumbered as 1-4.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other Drawing correction 11/02/05

TESFALDET BOCORE
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Paul Esatto (Reg. # 30,749) on Aug. 3, 2006.

The application has been amended as follows:

In the claim:

Claim 4, line 2, "claim 3" has been changed to read as---claim 1---.

Remarks:

The above Examiner's Amendment was made to change the dependency of claim 4 from cancelled claim 3 to claim 1.

2. The following is an examiner's statement of reasons for allowance: The claimed subject matter in claims 1,2,4 and 5 is allowable because the arts of record fail to teach or fairly suggest the claimed "A mobile station in a CDMA communication system, the mobile station comprising:
a plurality of finger sections in each of which each of plural radio waves being arrived

Art Unit: 2611

from a base station through a plurality of paths is inversely spread to regenerate data from said base station; and

a finger allocating section for allocating a path timing corresponding to each peak position of said plurality of radio waves to each of said plurality of finger sections, each of said plurality of radio waves being inversely spread in a path tracking range among segments positioned before and after the path timing allocated by said finger allocating section, said path tracking range **in each of said plurality of finger sections being variably determined based on the respective distances between peak positions of said plurality of radio waves. said path tracking range being broadened when said distances are large. and said path tracking range being narrowed when said distances are small. and said path timing range being independently determined for each of said plurality of finger section** as in claim 1 and

“A method for allocating a finger of a mobile station in CDMA communication system involving a plurality of finger sections for spreading inversely each of a plurality of radio waves being arrived from a base station through a plurality of paths to generate data from said base station, comprising the steps of:

detecting each peak of said plurality of radio waves to allocate path timing

corresponding to each peak of the positions detected to each of said plurality of finger sections;

deciding a path tracking range independently for each of said plurality of finger sections, said plurality of radio waves being inversely spread within said path tracking range among segments positioned before and after said path timing in each of said. plurality of

finger sections, **said path tracking range in each of said plurality of finger sections being variably determined based on the respective distances between peak positions of said plurality of radio waves, said path tracking range being broadened when said distances are large, and said path tracking range being narrowed when said distances are small** as in claim 5.”

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent Publication Number US2006/0098719 and US patent number 6,873,648 issued to Baltersee et al. and Atarius et al. respectively disclose a spread spectrum receiver having a means for tracking the peak of each received waveforms from the Rake fingers and a finger allocating in response to the received correlated peak values.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (571) 272-3015. The examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

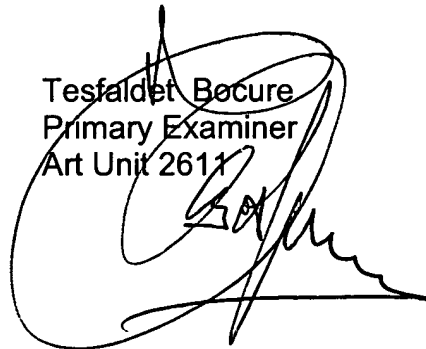
Art Unit: 2611

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti (Jay) Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tesfalder Bocure
Primary Examiner
Art Unit 2611

T.Bocure

A handwritten signature in black ink, appearing to read 'T. Bocure', is written over the printed name and title of the Primary Examiner.

FB
8/2/06

